CROSS WIND STRIPCROPPING

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 589B

CROSS WIND STRIPCROPPING

Cross wind stripcropping is growing crops in strips laid out perpendicular to the prevailing wind direction. The strips are arranged so that strips susceptible to wind erosion are alternated with strips having a protective cover during the wind erosion season.

PRACTICE INFORMATION

This practice reduces soil erosion from wind and protects growing crops from damage by wind blown soil particles.

Strips having protective cover are alternated with erosion-susceptible strips and generally the strip widths are equal across the field. For added protection, the erosion-susceptible strips may be narrower but not less than 25 feet.

Acceptable protective cover includes growing crops, grass, standing stubble, tilled residue, or other types of vegetative cover that provides adequate protection from wind erosion during the wind erosion season or periods of the year when wind erosion is expected to occur.

Specifications for establishing and maintaining this practice need to be site specific and based on soil, climate, crops, predicted crop residue production, and other criteria contained in the practice standard and specifications filed in the NRCS Field Office Technical Guide.

The following pages contain the conservation effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. Users are cautioned that these effects are estimates that may or may not apply to a specific site.

CONSERVATION PRACTICE PHYSICAL EFFECT WORKSHEET

NOTE: *recorded in Microsoft word 6.0 - use tabs to change cells/fields*

STATE	Iowa	FIELD OFFICE		DATE	12/5/96

PRACTICE: 589B Cross Wind Stripcropping	NOTES:
RESOURCE: SOIL **RESOURCE CONCERN: EROSION**	**Help Message: Click on form field for choice lists. Tab key to move around. "N/A" is the default.**

RESOURCE INDICATORS	**PHYSICAL EFFECTS**
SHEET AND RILL	moderate reduction in sheet and rill erosion
WIND	significant reduction in wind erosion
EPHEMERAL GULLY	slight reduction in ephemeral gully erosion
CLASSIC GULLY	N/A
STREAMBANK	N/A
IRRIGATION INDUCED	insignificant
SOIL MASS MOVEMENT	insignificant
ROADBANK/CONSTRUCTION	insignificant
OTHER	
RESOURCE CONCERN: **SOIL CONDITION**	
SOIL TILTH	insignificant
SOIL COMPACTION	insignificant
SOIL CONTAMINATION	
• SALTS	insignificant
• ORGANICS	N/A
• FERTILIZERS	insignificant
• PESTICIDES	N/A
• OTHER	
DEPOSITION/DAMAGE	
• ONSITE	moderate reduction/onsite deposition damage
• OFFSITE	slight decrease/offsite deposition damage
DEPOSITION/SAFETY	
• ONSITE	moderately improve onsite safety/deposition
• OFFSITE	moderately improve offsite safety hazard/depos.
OTHER	
RESOURCE: **WATER** RESOURCE CONCERN: **WATER QUANTITY**	
SEEPS	insignificant
RUNOFF/FLOODING	insignificant
EXCESS SUBSURFACE WATER	insignificant
INADEQUATE OUTLETS	insignificant
WATER MGT. IRRIGATION	
• SURFACE	N/A
• SPRINKLER	N/A
WATER MGT. NON-IRRIGATED	N/A
RESTRICTED FLOW CAPACITY	
• ONSITE	N/A
• OFFSITE	N/A
RESTRICTED STORAGE	slight reduction in sedimentation of H20 storage
OTHER	

RESOURCE: **WATER** RESOURCE CONCERN**: WATER QUALITY**	
RESOURCE INDICATORS	**PHYSICAL EFFECTS**
GROUNDWATER CONTAMINANTS	
• PESTICIDES	N/A
• NUTRIENTS AND ORGANICS	N/A
• SALINITY	N/A
• HEAVY METALS	N/A
• PATHOGENS	N/A
• OTHER	
SURFACE WATER CONTAMINANTS	
• PESTICIDES	slight reduction in SWater contam./pesticides
• NUTRIENTS AND ORGANICS	N/A
• SUSPENDED SEDIMENTS	slight reduction in SWater contam./susp. sedi.
• LOW DESOLVED OXYGEN	N/A
• SALINITY	N/A
• HEAVY METALS	N/A
• WATER TEMPERATURE	N/A
• PATHOGENS	N/A
AQUATIC HABITAT SUITABILITY	slight improvement in Aqua. Hab. Suit.
OTHER	
RESOURCE: **AIR** RESOURCE CONCERN: **AIR QUALITY**	
AIRBORNE SEDIMENT AND SMOKE PARTICLES	
• ONSITE SAFETY	sign. decrease in airborn sed.&smoke part./safety
• OFFSITE SAFETY	sign. decrease in airborn sed.&smoke part./safety
• ONSITE STRUCT. PROBLEMS	sign. decrease in struc. problems/dust and smoke
• OFFSITE STRUCT. PROBLEMS	sign. decrease in struc. problems/dust and smoke
• ONSITE HEALTH	moder. decrease in onsite health prob./dust&smoke
• OFFSITE HEALTH	mod. improvement in offsite health
AIRBORNE SEDIMENT CAUSING CONVEYANCE PROBLEMS	sign. decrease in airborn sediment/convey. prob.
AIRBORNE CHEMICAL DRIFT	N/A
AIRBORNE ODORS	N/A
FUNGI, MOLDS, AND POLLEN	N/A
OTHER	
RESOURCE CONCERN: **AIR CONDITION**	
AIR TEMPERATURE	N/A
AIR MOVEMENT (windbreak effect)	moder. improvement in air condition/ air movement
HUMIDITY	insignificant
OTHER	

RESOURCE: **PLANT** RESOURCE CONCERN: **SUITABILITY**	
RESOURCE INDICATORS	**PHYSICAL EFFECTS**
SITE ADAPTATION	insignificant
PLANT USE	slight improvement in plant suit. for intended use
OTHER	
RESOURCE CONCERN: **CONDITION**	
PRODUCTIVITY	moder. improvement in plant cond./ productivity
HEALTH, VIGOR, SURVIVAL	moder. improvement in plant health,vigor,survival
OTHER	
RESOURCE CONCERN: **MANAGEMENT**	
ESTAB., GROWTH, HARVEST	slight improvement in plant estab.,growth,harvest
NUTRIENT MANAGEMENT	insignificant
PESTS	insignificant
THREAT/ENDANGERED PLANTS	N/A
OTHER	
RESOURCE: **ANIMAL** RESOURCE CONCERN: **HABITAT**	
FOOD	moder. improvement in animal habitat/food supply
COVER/SHELTER	sign. improvement in animal habitat/cover,shelter
WATER (QUANTITY & QUALITY)	insignificant
OTHER	
RESOURCE CONCERN: **MANAGEMENT**	
POPULATION BALANCE	slight improvement in animal mgt./pop. balance
THREAT/ENDANGERED ANIMALS	insignificant
HEALTH	slight improvement in animal mgt./health
OTHER	
RESOURCE: **HUMAN** RESOURCE CONCERNS**: ECONOMIC CONSIDERATIONS**	
PLAN / COST EFFECTIVENESS	moderately cost effective
CLIENT FINANCIAL CONDITION	N/A
MARKETS FOR PRODUCTS	N/A
AVAILABLE LABOR	insignificant
AVAILABLE EQUIPMENT	insignificant

RESOURCE: **HUMAN** RESOURCE CONCERN: **SOCIAL CONSIDERATIONS**	
RESOURCE INDICATORS	**PHYSICAL EFFECTS**
PUBLIC HEALTH AND SAFETY	mod. improvement in public health & safety
PRIVATE/PUBLIC VALUES	mod. inprovement in private/public values
CLIENT CHARACTERISTICS	N/A
RISK TOLERANCE	N/A
TENURE	N/A
OTHER	
RESOURCE CONCERN: **CULTURAL CONSIDERATIONS**	
ABSENCE/PRESENCE OF CULTURAL RESOURCES	N/A
SIGNIFICANCE OF CULTURAL RESOURCES	N/A
MITIGATION OF NEGATIVE CULTURAL RES. IMPACTS	N/A
OTHER	